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20987 7590 07/17/2008  
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EXAMINER

RAINEY, ROBERT R

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

***Response to Arguments***

1. Applicant's arguments filed 6/30/2008 have been fully considered but they are not persuasive.

Applicant traverses the rejections under 35 U.S.C. 103 of independent claims 1 and 6, and by extension dependent claims 2-5 and 7-8.

Applicant argues that Aoki fails to disclose a black voltage. However, Fig. 3 shows transmittance, i.e. working voltage, and non-transmittance, i.e. black voltage, times. 1:55-60 teaches that these are achieved by changing the transmittance of the liquid crystal layer, which is known to be achieved by changing the voltage to the pixels. The black voltage is the voltage that causes non-transmittance. Thus Aoki does teach that a black voltage is applied to the pixels of the liquid crystal display during each frame.

Applicant asserts that Ozaki teaches using the integrated light emission directly rather than as a quotient. The use of a value derived by integration over a given time period already includes the time period as its base and any utility of the measurement requires that it be considered in relation to this base time, i.e. as a ratio of the base time. For example, if Ozaki were to assume that the measured time were minutes rather than the actual fraction of a second, he would conclude that the output was extremely small. While not necessary for this argument, Ozaki does explicitly teach that both gradation data and application time are inputs to its lookup table that takes into account the area of hatching, i.e. integration area (see for example 7:31-39). The period of interest as taught in

Aoki is a frame, i.e. vertical scanning period, thus the combination teaches a quotient based on the duration of the vertical scanning period.

Applicant states "The effective brightness is not obvious to a person of ordinary skill in the art to apply the method of integrating the amount of transmitted light." This is a conclusory statement not supported by evidence. In fact, from the beginning of CRT displays, which are impulse type displays, practitioners of the art have been well versed in the difference between instantaneous brightness, and human eye perceived, i.e. effective brightness, and, thus motivated, became skilled in measuring effective brightness by integrating light emission over eye-response similar time periods. Note to further prosecution: Even though examiner described "effective brightness" as relating to human eye response, it is an attempt to provide a rejection closer to the applicants disclosed invention than was claimed. The term "effective brightness" does not require that eye response be considered but could be considered a synonym for "average brightness".

Applicant's argument that Ozaki cannot overcome the issue of the delay phenomenon in the optical response is not directed to elements embodied in claim limitations.

Applicant argues that step (c) is not obvious. As to (c), examiner cited knowledge of one of ordinary skill in the art since examiner does not believe that applicant is claiming to have invented the relationship between backlight intensity, effective brightness, and effective light transmittance. If applicant does

see this as an inventive point, it should have been pointed out by a proper traversal of the notice. Simply stating that step (c) is not obvious is not an adequate traversal. (c), (d) and (e) all seem to claim very broad and well known material. If this is not the case it is not apparent from the claimed limitations.

Applicant argues that steps (d) and (e) as disclosed by the instant application at the cited location (page 2, line 23 to page 3 line 3) are not based on the features of effective brightness. However, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The rejection does not rely on the citation of admitted prior art to describe that (d) and (e) were based on the features of effective brightness, that would imply that the entirety of the claimed invention was taught by the instant application as conventional art. The rejection relied on the cited reference for the teaching of known steps to generate a data curve and a look-up table or other transformation to correlate the curve with gray levels.

Thus the office has met its burden and the rejections are maintained.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT R. RAINEY whose telephone number is

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(571)270-3313. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on (571) 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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